



# Twelve Tips for Fostering Trainees' Ownership of Patient Care

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**Abstract**

*Background:* The ability of trainees to assume ownership of patient care is essential for the maintenance of trainees' high degree of investment in their education as well as for a healthy progression towards independence after licensure. Numerous factors, including strict duty hours and new attention to quality and safety, interfere with trainees' assumption of such responsibility.

*Aims:* We aim to provide recommendations on how to foster trainees' ownership of patient care in today's clinical setting.

*Methods:* We conducted a PubMed search using phrases such as "patient responsibility," "patient ownership," and "patient accountability" to become well versed with the evidence and dissected and reflected on our own experiences with this issue.

*Conclusions:* We recommend reclaiming the term "ownership" (our first tip) and then present eleven tips in the following three domains: the learning environment, trainee attributes and skills, and capabilities of the supervisor, which we believe can successfully be applied to address this important challenge.

**Statement of Contributions**

The literature review was conducted by Ms. Chiel with further references recommended by Drs. Kesselheim and Greenzang. The following report was written by Ms. Chiel with much guidance and input from Drs. Kesselheim and Greenzang. We intend to submit a version of the manuscript (excluding the Table of Contents, Methods, and Conclusion) to the journal *Medical Teacher* for consideration for publication.

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## Introduction

Clinicians, whether in training or beyond, gain meaning and purpose when their work allows them to take responsibility for the care of patients. In today's clinical milieu, numerous barriers prevent trainees from accepting such responsibility. With the introduction of strict duty hour regulations, the number of trainees caring for a given patient has increased and, at the same time, the sense of responsibility espoused by an individual trainee can become diluted. In the process, patients may become "batons" in a relay race, continuously passed off in seemingly endless shift changes (Detsky et al. 2013). New concerns surrounding patient safety can distance trainees from meaningful patient care, with observation replacing autonomy (Cooke et al. 2006). Additionally, strict documentation protocols in electronic medical records promote screen time at the expense of personal interactions with patients. Finally, with increased time devoted to research, supervisors may work only infrequently in clinical settings and rarely with trainees, leading to hesitation in allowing trainees to adopt a role on par with their abilities (Cooke et al. 2006). Together, these factors may lead trainees to feel like cogs in a wheel, rather than integral to and highly responsible for their patients' wellbeing.

And yet, is not fostering a sense of responsibility and accountability towards patients one of the most fundamental objectives of medical education? Will not the trainee who has spent his or her formative years in a role of passivity struggle when assuming full patient care as an attending? Furthermore, in studies relating both to medical education specifically and adult learning theory more broadly, responsibility has been shown to be a prime driver for learning (Kesselheim et al. 2014; Ten Cate et al. 2011).

We must ensure that trainees have the opportunity to learn and exercise responsibility and accountability in patient care, in other words, to be their patients' doctors. In this article we offer twelve tips to facilitate trainee development of patient care "ownership." We will begin by discussing the definition of "ownership," and will then explore three domains in which ownership can be fostered: the learning environment, trainee attributes and skills, and capabilities of the supervisor.

## Methods

A preliminary PubMed search was conducted with search terms such as “patient responsibility,” “patient accountability,” and “patient ownership.” Relevant papers were reviewed as well as the pertinent references from these papers. Preliminary themes related to ownership of patient care were identified including: (1) the classical definition of “patient ownership”; (2) patient care duties as a means to gain medical knowledge, procedural skills, and doctoring abilities; (3) longitudinal patient care; (4) graduated autonomy; (5) communication skills; (6) reflective practice; (7) assessment; (8) feedback; and (9) role-modeling. Additional literature searches surrounding each of these themes were conducted. Themes absent from the initial literature search results but deemed to be important based on our collective experiences included: (1) trainees’ functioning within interprofessional teams; (2) trainee selection; and (3) professional development as it relates to care ownership. The literature related to each of these themes was reviewed. After reflection and discussion we agreed that recommendations pertaining to these above twelve themes would best inform readers as to how to foster trainee ownership of patient care. For ease of understanding, we chose to cluster these themes into three domains: (1) the learning environment; (2) trainee attributes and skills; and (3) instructor supervision and development. The recommendations that follow include background from the literature justifying the selection of the individual theme as well as novel recommendations based on our experiences.

### **Tip 1: Reclaim the term “ownership”**

Patient “ownership” classically represents a collection of values and attitudes, including initiative, knowledge, continuity of care, leadership, and advocacy, that a trainee is expected to adopt and exemplify when caring for a given patient (McLaren et al. 2013). The term “ownership,” while well established in medical culture and literature, may seem paternalistic in a progressively patient-centered era in which patient-doctor partnerships and therapeutic alliances are the gold standard. Of course, we use the term with the best of intentions. To say that a patient “belongs” to a trainee is not meant to be understood literally, but instead signifies that the trainee assumes professional responsibility and accountability for all aspects of that patient’s medical care. This terminology certainly does not preclude the active involvement of patients in their own care, nor does it diminish the central concept of team-based care. Absent a perfect term, we suggest the ongoing use of ‘ownership’ to describe the scope and breadth of duties that a trainee is expected to demonstrate in a patient’s care, but recommend a more targeted usage in which the duties themselves, and not the patients, are what is owned.

*Trainees learn powerful lessons about what is expected of them and what is valued in the physician role from their **learning environment**. The following four tips should be considered specifically when orienting trainees to a new service and during curricular design efforts. Each tip can contribute to the optimal environment in which ownership can flourish.*

### **Tip 2: Define the trainee's responsibilities within the team setting**

In order to adopt meaningful patient responsibility, a trainee must first be accepted as an integral member of both the field-specific and intraprofessional teams of which he or she is a part. Numerous incidents of information being withheld from trainees because they are perceived as “tourists” to the site of care have been described (Bleakley 2002; Ringsted 2011). Supervisors, with trainee input, should define specific expectations for trainees’ involvement in direct patient care as a member of the team. For example, trainees could be expected to represent the team on multidisciplinary rounds and to liaise between the various providers. In so doing, trainees would be filling an important role for the team while functioning effectively as their patients’ doctors.

Preparation for working in the team environment could start early, with new premedical requirements including courses on systems, collaboration, and quality improvement, thereby priming students for a profession dependent on cooperation and teamwork, rather than for the outdated role of the "sovereign physician" (Lucey 2013; Berwick et al. 2010).

### **Tip 3: Emphasize patient care duties as a vehicle for learning**

Patient care responsibilities are the substrate from which trainees acquire medical knowledge, procedural proficiency, and doctoring skills. The literature suggests that trainees research, learn, and remember more about conditions they have encountered and managed (Dornan et al. 2014; Bell et al. 2009; Hinchey et al. 2009). Similarly, going to the bedside and directly participating in patient care teaches trainees accountability and responsibility. Service to patients teaches trainees the fundamentals of doctoring, such as decision-making, communication, and prioritization of duties, while providing meaningful care (Kesselheim et al. 2013). Because learning emerges from routine patient care, we must ensure trainee inclusion in bedside discussions and examinations and participation in the holistic care of the patient. While the inclusion of trainees may make for lengthier encounters, bringing the trainee to the bedside and allowing her the opportunity to lead discussions and guide follow-up care unmistakably sends the message that the trainee is essential to the wellbeing of the patient.

### **Tip 4: Create longitudinal learning experiences**

Trainees perceive an increased sense of responsibility towards patients when caring for them over time, whether in the inpatient or outpatient setting. There are numerous opportunities within the current framework to facilitate longitudinal experiences for trainees. At the undergraduate level, longitudinal integrated clerkships allow students to observe and participate in care for the "whole patient," rather than for individual complaints fragmented by discipline (Greenhill et al. 2013). Adjunct longitudinal experiences that complement traditional block rotations have also been implemented successfully, including placing students in medical homes to improve care coordination for medically complex patients (Curry 2014). Similar interventions are possible for residency and fellowship training where outpatient continuity clinics are already prevalent. To

bolster that system, we can set expectations for care between visits, including follow-up and communication of test results. A notification system to alert trainees when patients they follow are admitted or seen by other members of the care team would also reinforce longitudinal care. To augment continuity in the inpatient setting, trainees should attempt to care for the same patient from shift to shift (Detsky et al. 2013). At discharge, trainees could be expected to attend patients' follow-up appointments or communicate pending results to patients.

### **Tip 5: Provide graduated opportunities for autonomy and decision-making**

Trainees should be afforded the space to make decisions for and with patients, even as they continue to prioritize patient safety. While finding the appropriate balance between autonomy and supervision, consider the trainee's prior experience, the trainee's perception of his or her competence in a given task, and the supervisor's impression of the trainee's preparedness for that task. Clearly articulated entrustable professional activities help instructors determine how much supervision is necessary for a given trainee at a given moment (Ten Cate et al. 2007).

Additionally, Farnan et al. has proposed the "SUPERB" model for effective supervision: "Set expectations for when to be notified, Uncertainty is a time to contact, Planned communication, Easily available, Reassure fears, and Balance autonomy and supervision" (2010). By establishing the first five of these conditions, the sixth, granting the appropriate level of responsibility, will more naturally follow as trainees will feel neither abandoned nor micromanaged. Clear communication between the supervisor and the trainee regarding the trainee's abilities and limits ultimately ensures appropriate supervision, while allowing the trainee to progress towards autonomy in both medical decision making and accountability.

*There are specific **trainee attributes and skills**, some of which are inherent and others achieved through training, which allow trainees to best claim ownership for patient care duties. The following three tips offer suggestions for selecting such trainees and nurturing these abilities.*



**Tip 6: Consider non-technical abilities during medical student and trainee selection**

In order to provide excellent care, trainees must exhibit high quality communication, demonstrate empathy and compassion, and function effectively as a team member. These non-technical skills are often informally assessed during admissions and selection procedures, but could be more consistently integrated. Previous work has suggested that consideration of academic successes alone may select for some medical students with arrogance and self-centeredness (Lowe et al. 2001). Further data suggests that students with lower scores on cognitive tests may have greater interpersonal skills than those who master the test (Gough 1978; Powis 2014). While academic standards and cognitive abilities are crucial to the practice of medicine, tests such as the Personal Qualities Assessment (PQA), which takes into account moral orientation, resilience, self-control, and involvement, may help identify applicants who are best fit for devoting their careers towards caring for others (Powis 2014). Scores on tests such as the PQA could serve as an additional data point for admissions decisions that would complement traditional measures like cognitive test scores, letters of recommendations, and interviews. Courses on humanism, professionalism and communication delivered throughout training would then reinforce ongoing development of these non-technical skills.

**Tip 7: Emphasize strong communication**

In an increasingly team-based environment, a patient's outcomes are highly dependent on successful communication within and between intraprofessional teams; thus, reinforce that the transmission of accurate, relevant, and timely information to the appropriate providers is an essential component of patient responsibility. The importance of straightforward communication is especially pronounced at change of shift, a time when information can easily be lost or the significance of a patient event misconstrued (Van Eaton et al. 2005; Mukherjee 2004). Make sure that communication does not bypass trainees during a given shift so that they remain updated on their patients. Additionally, encourage trainees to use well-developed sign-out tools, such as the I-PASS system, in order to prevent omissions (Starmer et al. 2014). Finally, give trainees time to ask about and understand the rationale behind the management decisions made

while the trainee was off duty. The transmission of this information will enhance trainee connectedness to their patients while ensuring fluid patient care.

### **Tip 8: Encourage reflective practice**

Reflection increases empathy and has been shown to benefit both the patient and the provider (DasGupta et al. 2004). Reflection on a patient encounter increases the trainee's sense of accountability towards that patient and endows the trainee with attitudes and tools that will allow her to provide increasingly humanistic care in the future. Reflection can take numerous forms. For example, trainees could be encouraged to journal meaningful patient encounters and be given the opportunity to share their work with peers and a supervisor in small groups. Teams could set aside time to debrief on how they processed that week's events. Finally, learning opportunities on mindfulness, perspective taking, and "emotional labour" skills enhance trainees' relationships with patients, thereby increasing trainees' sense of responsibility to them (Burks et al. 2012).

*The **capabilities of the supervisor** are integral in the advancement of the trainee's ownership of patient care. The final four tips provide recommendations on how the supervisor can prioritize, advise, and model ownership of clinical care.*

### **Tip 9: Provide specific feedback about ownership of patient care**

Trainees should receive timely feedback about their demonstration of patient care ownership much the same way that they would receive feedback about their management decisions overnight, their procedural techniques, or their development of a thorough differential diagnosis. Is the trainee familiar and fluent with the patient's history, current lab values, and test results? How does the trainee interact with the patient? Has the trainee communicated the plan to the patient, contacted other stake-holding providers, and planned for close follow-up after discharge? The literature regarding successful feedback in medical education is vast and offers many techniques that can be applied to feedback about ownership. For example, trainees should receive feedback from supervisors with whom they have a longitudinal relationship. Feedback should be appropriate to the level of training and should follow immediately after a patient

encounter (i.e. Bates et al. 2013). Send the message that patient ownership is a priority in your program by celebrating trainees who have displayed exemplary ownership of patient care, for example by creating “resident of the week” awards for those who have gone the extra mile in caring for their patients.

### **Tip 10: Assess trainee’s ownership of patient care**

Just as formative feedback should be provided to trainees about their ownership of patient care, assessment should be offered as well. Numerous training programs have already moved towards assessment of ownership of patient care. For example, pediatrics residency programs in the United States include “Professionalization,” or “a sense of duty and accountability to patients, society, and the profession,” among the developmental milestones upon which trainees are evaluated. Other programs offer formal in-training assessment on patient communication, organization, and collaboration, essential sub-features of patient responsibility (Ringsted et al. 2004). Peer-assessment of trainee professionalism has been shown to be effective (ie. Asch et al. 1998, Epstein et al. 2002) and could be solicited specifically for ownership of patient responsibilities. In addition, patient perceptions of the care received from a trainee could be a valuable component of assessment and incorporated by modifying patient exit surveys.

### **Tip 11: Role model**

The importance of establishing role models in medical education is well-studied (i.e Brainard et al. 2007, Kenny et al. 2003). Although the “hidden curriculum” is often thought of as the negative traits or behaviors that may be transmitted from a supervisor to a trainee, positive virtues are just as likely to be inculcated and absorbed through role modeling. While supervisors may delegate certain aspects of a patient’s care to the trainee, they can still demonstrate accountability by following up on tasks assigned to other team members. This may be modelled during daily rounds on an inpatient unit. Alternatively, since longitudinal care is integral to patient ownership (see Tip 4), follow up with your trainee to ensure that the patient has appropriate follow up appointments scheduled and that test results are communicated after discharge.

**Tip 12: Create opportunities for professional development**

We believe that following the above eleven tips will go a long way towards fostering a sense of ownership of patient care in trainees; however, true mastery of these techniques will take time, energy, and practice. Faculty development courses for clinical supervisors should devote attention to issues of ownership and could include opportunities for role-play as well as discussion of effective techniques and challenges in developing trainees' sense of responsibility in patient care.

**Concluding comments:** By reclaiming the term “ownership,” and with attention to the learning environment, the attributes and skills of the trainee, and the supervisory skills of the instructor, we believe it is possible to reinvigorate trainees’ ownership of patient care responsibilities.

The above work suggests that fostering ownership of patient care in trainees is complex and dependent on numerous factors including the structure of rotations and curricula, the attributes, inherent and learned, of individual trainees, and the capabilities of the supervisor. Because trainee ownership is dependent on myriad factors, and because the onus of ensuring the realization of these factors is divided amongst numerous people, dedicated attention to ownership must be paid in order to guarantee its cultivation. We have attempted to justify the importance of ownership of patient care in the growth and development of trainees with the hopes that admissions committees, instructors, trainees, members of interprofessional teams, faculty development committees, and other involved personnel will recognize and share in this goal.

The proposed twelve tips were carefully researched and crafted. One strength of the presented tips is that they are each products of an extensive literature search. The majority of the tips are accompanied by references to existing literature that illustrate how the global theme overlaying the tip relates to fostering ownership of patient care. We have further offered novel recommendations that allow for easy translation of the given theoretical theme into daily practice. These recommendations were culled from our own experiences, and enriched by our diversity of viewpoints, as our team consists of an attending physician, a fellow, and a medical student.

Our study contains several limitations. Many of the included references are opinion pieces and their content, as it relates to patient ownership, has not yet been formally tested. For those themes that do have a strong evidence base, the literature is often restricted to a particular setting or to a specific level of training. For example, while longitudinal relationships have been shown to foster strong ownership of patient care in medical students, there is a paucity of evidence surrounding longitudinal care in post-graduate training. Underlying our recommendations to expand longitudinal opportunities to residents and fellows is the assumption that the literature surrounding longitudinal care is indeed generalizable. Additionally, while some of the tips have

been well-studied, there have not yet been studies to formally validate this novel combination of recommendations.

This work may serve as a springboard for numerous future studies. The design and validation of a scale that measures ownership of patient care would likely be the most useful next step in better elucidating which combination of the proposed interventions leads to the greatest benefits. For example, patient care ownership could be measured and compared in students who took pre-medical courses on systems and collaboration and those who did not to see if the desirable outcome was obtained. We hope that this work will spark conversations among medical educators and trainees about the state of ownership of patient care at their institutions, that our recommendations will be implemented as appropriate, and that further ideas for best fostering patient care ownership are developed and disseminated.

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